ABSTRACT

An exposure method for transferring a pattern on a mask onto a substrate using a catadioptric projection optical system having partial lens barrels that hold optical systems having optical axes that extend in mutually different directions. The method includes measuring an amount of rotation of the catadioptric projection optical system about an optical axis intersecting at least one of the mask and the substrate; and adjusting at least one of an attitude and a scan direction of at least one of the mask and the substrate based on a measurement result of the amount of rotation. The substrate is exposed by adjusting at least one of the attitude and the scan direction of at least one of the mask and the substrate so that the rotation of the projected image on the substrate attributable to the rotation of the projection optical system is offset; thus, excellent exposure accuracy is achieved.